

CLAIM AMENDMENTS

1. (Currently Amended) A method ~~to monitor~~ for monitoring a network ~~by a network monitor~~, comprising:
  - ~~routing data packets through a router;~~
  - ~~generating~~ receiving data packet flow records ~~for at least some of said data packets~~ from at least one network router;
  - ~~filtering said at least some of the~~ flow records;
  - extracting packet information from ~~the~~ said filtered flow records, wherein ~~the~~ said extracted packet information comprises ~~internet~~ information of at least one target of interest; and
  - performing active measurements ~~to~~ of said at least one target of interest ~~using the~~ based on said extracted packet information.
2. (Currently Amended) The method according to claim 1, said filtering ~~step~~ comprising: selecting flow records based on ~~an address field of~~ packet routing information in said received flow records.
3. (Currently Amended) The method according to claim 2, said filtering ~~step~~ comprising selecting flow records having non-local destination or source addresses ~~of non-local hosts~~.
4. (Currently Amended) The method according to claim 2, said filtering ~~step~~ comprising selecting ~~data packets~~ flow records having local destination or source addresses ~~of local hosts~~.
5. (Currently Amended) The method according to claim 2, said filtering ~~step~~ comprising selecting flow records having destination or source addresses containing associated with performing critical services ~~based on the address field or a port field of the flow records~~.
6. (Currently Amended) The method according to claim 1, said filtering ~~step~~ comprising randomly selecting ~~data packets~~ flow records from said ~~filtered data packets~~ received flow records.
7. (Currently Amended) The method according to claim 1, wherein said performance of active measurements comprises a ping process.
8. (Currently Amended) The method according to claim 1, wherein said performance of active measurements comprises a traceroute process.

9. (Currently Amended) The method according to claim 1, ~~wherein further comprising selecting~~ the nature of said active measurements are selected based on said at least one target of interest.

10. (Currently Amended) ~~An network monitoring apparatus for monitoring a network,~~  
comprising:

~~a router for routing data packets, wherein said router generates flow records for at least some of~~  
~~said data packets; and~~

a monitor configured for receiving the data packet flow records from at least one network router,  
~~wherein said monitor filters for filtering~~ said flow records, ~~and further wherein said monitor extracts for~~  
extracting packet information from said filtered flow records, ~~the said~~ extracted packet information  
comprising ~~internet~~ information of at least one target of interest, ~~wherein said monitor performs and for~~  
performing active measurements ~~to~~ of said target of interest ~~using the~~ based on said extracted packet  
information.

11. (Currently Amended) The apparatus according to claim 10, wherein said monitor ~~filters is~~  
configured to filter said flow records based on ~~an address field of each packet routing information in~~  
said flow records.

12. (Currently Amended) The apparatus according to claim 11, wherein said monitor ~~selects is~~  
configured for selecting flow records having non-local destination or source ~~addresses of non-local~~  
hosts.

13. (Currently Amended) The apparatus according to claim 11, wherein said monitor ~~selects is~~  
configured for selecting flow records having local destination or source ~~addresses of local~~ hosts.

14. (Currently Amended) The apparatus according to claim 11, wherein said monitor ~~selects~~  
data packets for is configured for selecting flow records having destination or source addresses  
associated with performing critical services.

15. (Currently Amended) The apparatus according to claim 10, wherein said monitor is  
configured for randomly selects selecting flow records from ~~the said received~~ flow records received by  
~~said monitor.~~

16. (Currently Amended) The apparatus according to claim 10, wherein said performance of  
active measurements comprises a ping process

17. (Currently Amended) The apparatus according to claim 10, wherein said performance of active measurements comprises a traceroute process.

18. (Currently Amended) The apparatus according to claim 10, wherein said monitor is configured for selecting the nature of said active measurements ~~are selected~~ based on said at least one target of interest.

19. (Currently Amended) A method ~~to monitor~~ for monitoring a network ~~by a network monitor~~, comprising:

~~routing data packets through a router;~~

~~generating~~ receiving data packet flow records ~~for at least a fraction of said data packets from at least one network router;~~

extracting packet information from at least a fraction of said received flow records, wherein ~~the~~ said extracted packet information comprises ~~internet~~ information of at least one target of interest; and

performing active measurements ~~to~~ of said at least one target of interest ~~using the~~ based on said extracted packet information.

20-25 (Cancelled)

26. (Currently Amended) The method according to claim 19, wherein said performance of active measurements comprises a ping process.

27. (Currently Amended) The method according to claim 19, wherein said performance of active measurements comprises a traceroute process.

28. (Newly Added) A network monitoring apparatus, comprising a monitor configured for performing the method of claim 19.

29. (Newly Added) The method of claim 1, further comprising:

routing said data packets through said at least one router; and

generating said data packet flow records.

30. (Newly Added) The apparatus of claim 10, further comprising said at least one router configured for routing said data packets and generating said data packet flow records.

31. (Newly Added) The method of claim 19, further comprising:

routing said data packets through said at least one router; and

generating said data packet flow records.

32. (Newly Added) The apparatus of claim 28, further comprising said at least one router configured for routing said data packets and generating said data packet flow records.